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Mouse Jarid2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21537b

Product Information

Application	WB, E
Primary Accession	Q62315
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52505
Calculated MW	137445

Additional Information

Gene ID	16468
Other Names	Protein Jumonji, Jumonji/ARID domain-containing protein 2, Jarid2, Jmj
Target/Specificity	This Mouse Jarid2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1107-1141 amino acids from the C-terminal region of Mouse Jarid2.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Jarid2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Jarid2
Synonyms	Jmj
Function	Regulator of histone methyltransferase complexes that plays an essential role in embryonic development, including heart and liver development, neural tube fusion process and hematopoiesis (PubMed:10807864, PubMed:12852854, PubMed:12890668, PubMed:15542826,

	PubMed:15870077, PubMed:19010785, PubMed:20064375, PubMed:20064376, PubMed:20075857). Acts as an accessory subunit for the core PRC2 (Polycomb repressive complex 2) complex, which mediates histone H3K27 (H3K27me3) trimethylation on chromatin (PubMed:20064375, PubMed:20064376). Binds DNA and mediates the recruitment of the PRC2 complex to target genes in embryonic stem cells, thereby playing a key role in stem cell differentiation and normal embryonic development (PubMed:20064375, PubMed:20075857). In cardiac cells, it is required to repress expression of cyclin-D1 (CCND1) by activating methylation of 'Lys-9' of histone H3 (H3K9me) by the GLP1/EHMT1 and G9a/EHMT2 histone methyltransferases (PubMed:12852854, PubMed:12890668, PubMed:19010785). Also acts as a transcriptional repressor of ANF via its interaction with GATA4 and NKX2-5 (PubMed:15542826). Participates in the negative regulation of cell proliferation signaling (PubMed:10913339). Does not have histone demethylase activity (PubMed:20064376).
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00355, ECO:0000255|PROSITE-ProRule:PRU00537, ECO:0000269|PubMed:10807864, ECO:0000269|PubMed:10913339, ECO:0000269|PubMed:20064375, ECO:0000269|PubMed:20064376}. Note=Colocalizes with the PRC2 complex on chromatin
Tissue Location	Widely expressed in embryos. In adults, expressed at high levels in heart, skeletal muscle, brain and thymus

Background

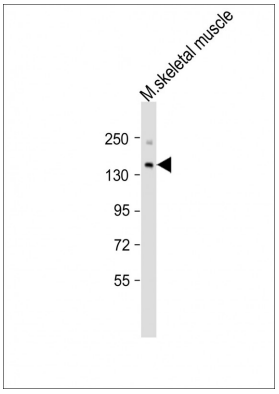
Regulator of histone methyltransferase complexes that plays an essential role in embryonic development, including heart and liver development, neural tube fusion process and hematopoiesis. Acts by modulating histone methyltransferase activity and promoting the recruitment of histone methyltransferase complexes to their target genes. Binds DNA and mediates the recruitment of the PRC2 complex to target genes in embryonic stem cells. Does not have histone demethylase activity but regulates activity of various histone methyltransferase complexes. In embryonic stem cells, it associates with the PRC2 complex and inhibits trimethylation of 'Lys-27' of histone H3 (H3K27me3) by the PRC2 complex, thereby playing a key role in differentiation of embryonic stem cells and normal development. In cardiac cells, it is required to repress expression of cyclin-D1 (CCND1) by activating methylation of 'Lys-9' of histone H3 (H3K9me) by the GLP1/EHMT1 and G9a/EHMT2 histone methyltransferases. Also acts as a transcriptional repressor of ANF via its interaction with GATA4 and NKX2-5. Participates in the negative regulation of cell proliferation signaling.

References

Takeuchi T.,et al.Genes Dev. 9:1211-1222(1995).
Carninci P.,et al.Science 309:1559-1563(2005).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Motoyama J.,et al.Mech. Dev. 66:27-37(1997).
Takeuchi T.,et al.Mech. Dev. 86:29-38(1999).

Images

Anti-Jarid2 Antibody (C-term)at 1:2000 dilution + mouse skeletal muscle lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 137 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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